A|Z

Changing effect of place on frontage design in the context of cultural sustainability

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Abstract
The most important component that forms the values, lifestyle, beliefs, traditions, in short, the whole of the material and spiritual values of a society is culture. Culture is the whole of the things that the human learned, applied and maintained as long as they exist. Culture shows change and sustainability as a result of differentiation of factors which compose the culture. The architecture that is one of the important components that reflect the culture is also affected by this change process. The characteristic features of existing cultural identity in architecture are observed in houses where the daily life is maintained. The functional changes occurred in houses are reflected physically and they mostly affect the frontage construct as well. Thus, the character of the street where the houses are located is also changed.

In this context, in study, there was aimed to examine the effect of spatial changes occurred dependent on time on frontage construct in houses where non-Muslim people who were exposed to population exchange and Muslim people who were settled to the houses which were quit after population exchange in the settlement of Sille that is connected to the city of Konya.

The effect of time-dependent spatial change of 10 (ten) tiered genuine houses in Haci Ali Aga Street that is the important house settlement in Sille on frontage shaping was examined through the graphics created and physical changes (frontage character) were revealed via functional changes (spatial).

Keywords
Cultural sustainability, House, Frontage design, Change in interior places.

1. Introduction

Culture constitutes the values, traditions, architectural structures, written and verbal works, in short, the lifestyle of the society (Gözütok, 2008). According to English anthropologist Tylor (1871), the culture is; a complex whole consist of knowledge, belief, art and traditions learned and obtained by human species as a member of a society and all abilities, skills, and habits obtained by the human as a member of human society. Culture changes with the new ideas and inventions human developed against the new demands and problems. The concept of time is the most important component in this changing process (Murdock, 1949). Although the culture is strong enough in order not to change easily under natural conditions, the cultures show change over the time by complying with the natural environment. The architecture that is one of the important components reflecting the culture is also affected by this changing process. As a result of the fact that the concept of culture that is created by the lifestyle, family structure and religious beliefs of human is effective in determining the living standards, it plays an important role also while the architecture takes shape. The most obvious results of these interventions made to the living spaces of human are emerging in housing zones. The housing zones show continuity while having changes in their forms and functions as a result of community, social, economic and technological developments while the cultures change because of changing natural conditions throughout the history. Thus, the characteristic features of cultural identity existing in architecture are mostly observed in houses where daily life is lived.

As long as the cultures change throughout the history, the housing spaces; show continuity while they live changes about their forms and functions as a result of social, economic and technological developments. Existing is, in fact, the epitome of change and qualifies the house as an organism and this organism is in need of changing independently of the form in order to survive. This situation is necessary for the continuity of it and the society in need of it. It should develop the conceptual infrastructure it has in this continuity by assimilating, isolate from the unnecessary things and it should adapt itself to changing society structure, life, meaning and needs (Dener, 1994). In a society, there are occurring compulsory social socio-cultural changes as war, earthquake, exchange as well as time-dependent natural changes. These changes occurred are affecting also the formation of houses (Taş and Ertaş, 2015). It turns into architectural mass by shaping with house, interior structure and construction elements. Thus, the changes occurring on these mostly effects also frontage structure. It is possible to have information about the history and culture of a settlement at the first look by using the frontages of the buildings. Thus, the frontages are some of the most important instruments in order to understand the culture of a settlement.

In this context, in the study, the settlement of Konya/Sille where Muslim and non-Muslim people lived together and that is a different settlement with its culture, traditions and customs, lifestyle and the geographical structure was discussed. It was determined the changing society in Sille over the time changed the current house structures depending on their needs in functional aspects. Thus, the spatial change experienced in houses depending upon the function change caused physical changes about the frontage layout. This change lived because of cultural sustainability was examined in Hacı Ali Aga Street that is at the entrance of Sille and that is consisting of the genuine structure housing. The fact that it is inevitable for the culture to show change in continuity and physical changes (frontage character) determined over the functional (spatial) changes of 10 (ten) houses ranging around a Street which is reflecting the commercial life, socio-cultural structure and architectural character of the region and that is thought to be organized for tourism were revealed on graphics

2. Cultural continuity/change

The culture is the whole of material and moral values of a society. Culture is a fact that is directly in contact

with the people and a fact that shapes the life of the people and holds them together. The culture of a society consists of some social institutions and organizations as the culture, language, religion, ethics, law, tradition, behavior and pleasures, customs, art, economic, philosophical and scientific training. The culture and art assets created by different factors over time constitute the society's cultural heritage, as well as they, provide the social development (Akgül, 2004; Erişen, 2010). The facts as; beliefs, customs, behavior, lifestyle, standards of judgment, actions, and thoughts forming the social life that we can sort as the factors that create the culture is decisive in the process of shaping the human environment from primitive man to modern man (Özdemir, 2011).

Many factors forming the culture as language, religion, traditions, customs, behavior, and lifestyle show continuity from generation to generation in time. The continuity is not a fact that modificates itself. There could only be mentioned about the continuity of an asset, a mean or a system, because, "the continuity is the quality of the continuous one" and it means that the versatile conditions that are qualifying system are ongoing in a given system integrity (Toydemir, 1989). The change about the cultures is also lived in this continuity state.

The culture is changing due to different reasons when it is being transmitted from generation to generation. In this regard, Moore (1963) specified that; it is not possible to consider the change apart from the concept of time and "the change" is frequent and continuous for any society and culture. The culture varies in time by being adapted to the environment and it adapts to the shape of people's lives. This situation causes having the change in places and the continuity is provided in time.

Güvenç (2011) specified that there is only one rule of the life and cultures that did not change since creation is the change and continuity. He specified that individuals and communities, tribes, states lived and went out of existence and besides that, the continuity of cultures and civilizations was protected by changing and also besides that only the idea could be defended that the fact of continuity can only be realized through the way or process of change.

Culture and cultural sustainability are interdependent concepts. Cultural sustainability exits while the requirements of created cultural expressions, lifestyle, and habits are added to the life of society (Çahantimur, 2007). However, continuity makes the change inevitable. Although culture and change seems incompatible facts at first look, these facts at the same time are holding with each other because, although it is late, the traditions assimilate the change and become the traditions of tomorrow (İzbul, 2004).

The cultural sustainability in architectural design should be expressed as the transmission of experience and knowledge to the future collected by the individuals and therefore the communities where the individuals are in. The common cultural heritage created by the societies describe the formation of cities and urban spaces. In this context, socio-cultural, economic and spatial layers are composed in urban layout and the sustainability plays an important role in developing the ideological structure and integrity of society by protecting the relationship between these layers through architectural design (Öktem, 2013).

Culture changes, but this change takes place through adaptation. Although the natural conditions are not strong enough to change the culture, the cultures adapt the natural environment in time. As the social conditions and needs change, satisfaction level provided by traditional solution methods decreases and changes. The new methods and ways, in order to solve the problems and needs occurred against the changing conditions, are created. The culture changes with the new ideas and inventions that are developed by the people against new needs and problems (The Timeturk, 2015). Changing is a basic attribute of human communities because; there is no society that does not change above ground. However, the speed, direction, kind of change varies from community to community. The speed of change in societies where the traditional features

are intensive is slower than the modern societies (The Timeturk, 2015).

Turhan (1972) divides the changes on culture into two parts as free culture change and compulsory culture change in terms of change types. According to him, the free culture change means the changes in the structure of a social group or society as a result of the fact that the community adopts a certain part of different culture without being under any internal or external pressure while the society has relations with another society or another social group that has a foreign culture. Also, the compulsory culture change is the change in the structure of society created as a result of the facts that one of two social groups or societies that have different cultures make pressure on the other one in order to make them accept all or some part of their own culture or the directors of a society try to impose all or some of the cultures of a foreign society to their own society coercively (Anıl, 2011).

If it is thought that there is only one rule of the fact of culture that did not change is change and continuity, the inherited new generation helps the culture to be rich with the innovations and changes they created. In this process, some new components can be added to current culture and some components can also be removed.

3. The effect of cultural sustainability on spatial changes of houses

The house; is the most basic, most exclusive and smallest building type that is directly affected by the changing values and that is suitable for cross-cultural comparison. The houses cater for many purposes because, the house is a cultural fact and highly affected by cultural values of the society where it belongs to. Since the early ages, the house became a place where many physical activities are included for people as well as being only the harboring place (Rapoport, 2004).

Turgut (2003) explains the interaction of cultural change with the house as follows. "The housing place during culture-place interaction process has the time-dependent characteristics that reflect the dynamic and changing relationship between human and en-

vironment. The cultural components that have dynamic structure change in time by the acculturation effects and the behavioral and spatial features also change accordingly" (Çakmak, 2011). Thus, the identity and character of a culture are examined firstly; the values of it are gained and a type of house which responses cultural and physical needs emerge accordingly. Another point to be paid attention in the house designing is considering the typical characteristics of the culture of the region where the house is designed because; these characteristics also affect the shaping of houses. The spatial change; focus on a purpose that tries to reveal whether experienced places support the human activities or not, whether quality place environments are provided or not for meeting the needs and that is useful for making the inhabitability sustainable (Aydın and Yaldız, 2010).

The formation of housing is taking shape with spatial and structural (material) change processes because of the fact that it cannot fulfill the performance features depending on changes of cultural factors over the time. As Rapoport specified, changing of human and social, cultural, economic and physical factors around the people cause massic and formal changes in houses. These changes create the spatial change processes in houses. Besides that, there are some structural changes in houses depending on both aging and repairing (Şengün, 2007). Structural changing processes emerged as a result of changing the structural elements and materials which got old in time and cannot shirk its duty with new ones in order to ensure the comfort conditions of today (Üçer, 2011). All these changing processes in the study; reveal the effect of cultural change/continuity over the format in two ways as physical and functional.

The physical changes are; the new place organizations carried out inside or outside the building as a result of the changes on the needs of users, deteriorations/aging on the system of the building occurred because of the external factors, installation of new functions to the building or removing some functions of it. The effective thing

about this change type is the failure to provide the comfort that can response the new requirements that forms the building structure and generally reveals as a result of materials used and technological changes (Altınok, 2007).

Also, the functional change is; a change that generally emerges before the physical changing. The social, technological and economic characteristics mentioned in society change, become different in time, thus, the change or addition for the function which can be described as relevance in terms of usage and operation becomes inevitable (Altınok, 2007). The functions of places could also change as a result of these changes. The formation of functional change could be dependent upon many reasons. The user and his/her wants could take the place on the top among these reasons and plan scheme, the quality of circulation components, color, size, shape features of the materials which are especially used in wet volumes also become effective (Altınok, 2007). The change on the function depended on the intended use without changing the form of the place in time as a result of economic reasons or differentiation of users can become inevitable, and the structure can show continuity with new functions in different forms.

4. Methodology

Sille is a different settlement with its culture, traditions and customs, beliefs, lifestyle and geographical structure where Muslim, non-Muslim public live together. The Lausanne agreement made in 1923 became a turning point also for the history of Sille. The Greek public was subjected to forced migration with population exchange in Sille where Turkish and Greek people lived together before the proclamation of the republic has the population about 18.000.

Turkish immigrants have been quartered in the houses which were left by the Greek people exchanged (Tapur, 2013). As a result of changing public profile, culture, belief and family structure also changed. It can be seen that these changes affected the houses as well.

Sille is a developed settlement before the proclamation of the republic. However, the treaty of Lausanne has been made in 1923 is a turning point for the history of Sille. The Greek people live in Sille were subjected to forced migration with the population exchange realized in 1923 and they were sent abroad (Tapur, 2013). Thus, the population of Sille where the big part of the population was formed by Greek people has decreased greatly. The locals who were mostly Muslims lived in settlement until 1980 could not have developed themselves enough about agriculture, trade, and crafts and began to decline in terms of socio-economic conditions. The locals began to migrate to big cities. As a result of this, the population reduced and the changes were lived in spaces according to the lifestyle because of the fact that the Muslims began to live in houses.

After 1980, the population continuously lived in Sille diminished more and the houses were used as the summer house and most of the houses remained neglected. The restoration projects of important monuments with street rehabilitations on the basis of frontage as a result of increasing tourism potential in recent years. There was not only lived the changes on the level of frontage during the street rehabilitations and there was observed that the changes were lived also about interior constructs.

While the development of Sille in history is examined, it is seen that 3 periods determining the residential character were revealed in the study. These are listed below.

1. Seljuk and Ottoman periods coming after the first periods of Christianity and Republic period before 1923 Lausanne agreement,

2. The period between "after the exchange in1923 "and "the period while the locals migrated from the settlement in 1980",

3. The period after 1980.

The cultural change lived in these periods affected the social, cultural and economic structure and caused the change about the living spaces. The houses where the daily life goes on are also the living spaces where this change is observed. In the study, the functional changes were examined through the
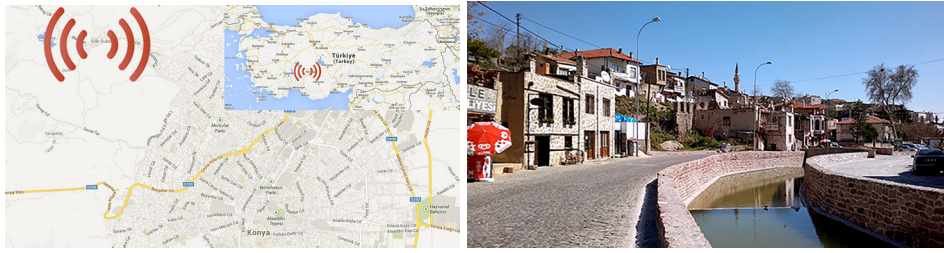
Figure 1. *The location and general view of Sille (The Map, 2016), (The Suffagah, 2016).*
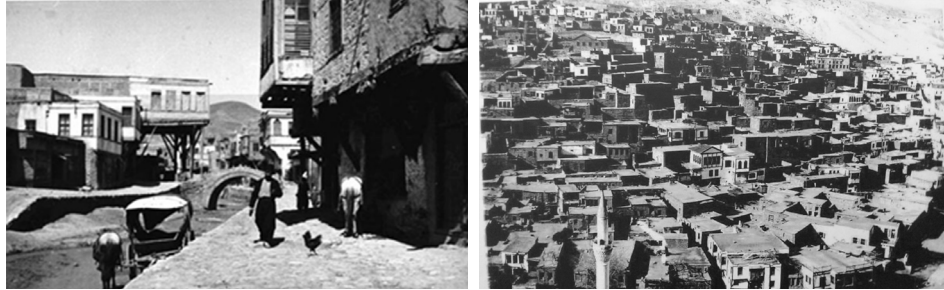
Figure 2. *Sille in 1905 (Kuşçu, 2006; Aklanoğlu, 2009), (The Ektem, 2016).*

today's current usage situation in order to reveal the changing structure form and components over the time in the houses. Thus, Hacı Ali Aga Street was discussed through the 10 houses which still include original houses structure.

5. Case study
5.1. General information about Sille

Sille that is 8 km far away from the center and located in the north-west of Konya city is a settlement whose past goes back a long way and which played host for many empires as Greek, Byzantine, Seljuks and Ottomans (Erdem et al., 2010)(Figure 1).

The Sille settlement that was taken into the consideration as an important commercial center in history and established onto the silk road and spice route; offers a rich appearance in terms of historical and cultural values with its mosques, churches, streets, fountains and traditional houses with flat roof in cubic architectural style that integrate with sloping topography (Aklanoğlu, 2009)(Figure 2).

It is possible to see the examples of traditional architecture restructuring of Anatolia in Sille. Sille that has the collective settlement feature as settlement type is lying in the east-west direction towards the north of valley in step-shaped (Tapur, 2013).

It is understood from old pictures and documents that; a crowd population lived in the past on the tissue which has the cubic architectural style that is unique to the region on the slopes and with the flat roof, sloping and integrating with sloping topography (Erdem et al., 2010)(Figure 3).

The housing; has been formed gradually in the shape of neighborhoods and streets, terraces in conformity with the land by rising upwards starting from the two shores of the river because of geographical position (Aklanoğlu, 2009). The position of the structures forms the city's residential fabric with a sense of perspective because of the shape of the land. None of the housing prevents the sun and landscape of each other, that's why the tissue in Sille is settling in harmony with nature (Kurak Açıcı, 2014). Most of the houses in the settlement have the same character. Also, some houses have a garden at front or backside in harmony with the land.

The traditional Sille houses which have a cubic external format generally have flat roofs and the houses with the roof are the minute amount. Sille Stone is used as building material from quarries, usually near the buildings of the region. Stone, construction technique, depending on the structure form adds it can be argued that the diffence (Sonmez, 2014). The houses have been designed in small scale and the functionality was prioritized according to the lifestyle. The numbers of floors in houses are affected directly by the
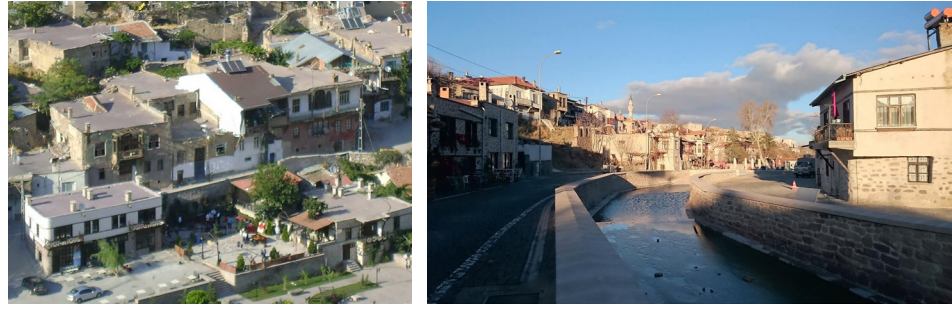
Figure 3. *Cubic exterior remodeling view of Sille (The Meramderem, 2016), (Ertaş, 2016).*

Figure 4. *The two-storey Sille houses (Ertaş, 2016).*

Figure 5. *General view of the Sille houses (Ertaş, 2016).*

position of the structure in the sloping terrain and the relation of housing with the street. The entering to the Sille housing that is generally two-storey is sometimes from the single door and sometimes from two doors and this situation is determined by the topography of the land (Aklanoğlu, 2009) (Figure 4).

The upper floor; which composed the main floor of housing in Sille reflects the features of Typology of Turkish house plan. Mostly the plan type with inner hall; and in some samples, outer hall or L-Shaped hall seems (Karpuz, 2000).

The houses have been fictionalized from the living and service areas. The living areas are composed of the room, hall, hanay and service areas are com-

posed of kitchen, stairs, burn-house, stony place, bievi-büevi, lumber room, bathroom (bathing cubicle) and toilet (Taş, 2015).

In terms of frontage character, Sille houses generally reflect the frontage features of traditional Turkish Anatolian House (Erdem et al., 2010). Hall space is an important factor in the plan schemes of houses that affect the frontage. Hall generally takes place in the middle of the plan and the frontage could be symmetrical accordingly (Şahin, 2010). The overhanging parts generally have been as the outer extension of hall or balcony in houses formed according to the slope of the land (Figure 5).

5.2. The houses in Hacı Ali Aga Street

Today in Sille; there are two important streets named "Hükümet" that starts at Konya-Sille highway that is on the east of settlement plan and maintains until the west side of settlement and the other one named "Baraj" that is on the south side. Further, "Karataş" Street on the North side and "Hacı Ali Ağa" Street seems on the Picture in the middle are the streets where the settlement is intensive (Tapur, 2013).

Hacı Ali Aga Street takes place at the entrance of Sille on the main axis in terms of its location. Street is located in the center of historical settlement and there are a lot of cultural assets around it. The Street has the value of a rich cultural heritage with the structures that have either house features or commercial features (Figure 6). Hacı Ali Aga Street that has the cultural, historical and touristic source values is in the area that was taken into consideration as the protected area in 2001 and it consists of mostly 2nd Degree proprietary structures that maintain their original condition. The latest frontal improvements have been made for most of the structures by Seljuk Municipality in 2015.

In the study; 10 structures which are maintaining the original condition and reflecting the commercial life, socio-cultural structure and architectural character of the region and which have been built for the purpose of houses in Hacı Ali Aga Street are discussed (Figure 7).

5.3. Creating the functional changes tables

The effect of time-dependent spatial change of 10 (ten) tiered genuine houses in Hacı Ali Aga Street that is the important house settlement in Sille were revealed via functional changes.

The functional change was approached in terms of adding the spaces or changing the spaces. The spaces added or changed depending on the functions caused the change in the structure form and this situation also meant the change on the frontage and general character of the street. Thus, the functional changes graphics were created in order to reveal this change on structure form. Graphics have

Figure 6. *The general view of Hacı Ali Aga Street.*
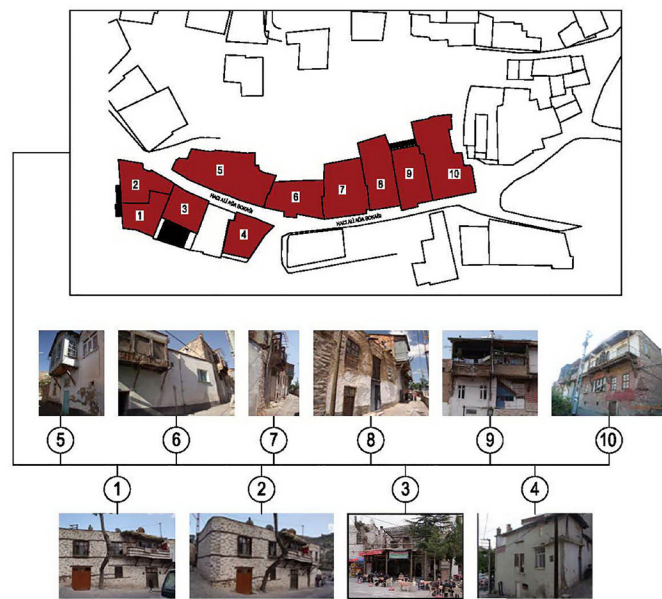

Figure 7. *The designated houses in Hacı Ali Aga Street.*

been evaluated through the changes occurred in elapsed time until works completed in 2015.

Functional change tables have been factionalized to reveal the 3 (three) periods determined depending on the culture change occurred in the residential area. The time concept in functional changes was explained by coloring method. The changing functions of spaces in these periods have not been encoloured before 1923 and the period between the years of 1923-1980 was shown with blue color and the period after 1980 was shown as the yellow color. On the other hand, the fronts were renewed with the restoration project in 2015 and the spaces changed correspondingly were processed after 1980.

Besides, the functional changes were approached in two groups as add-
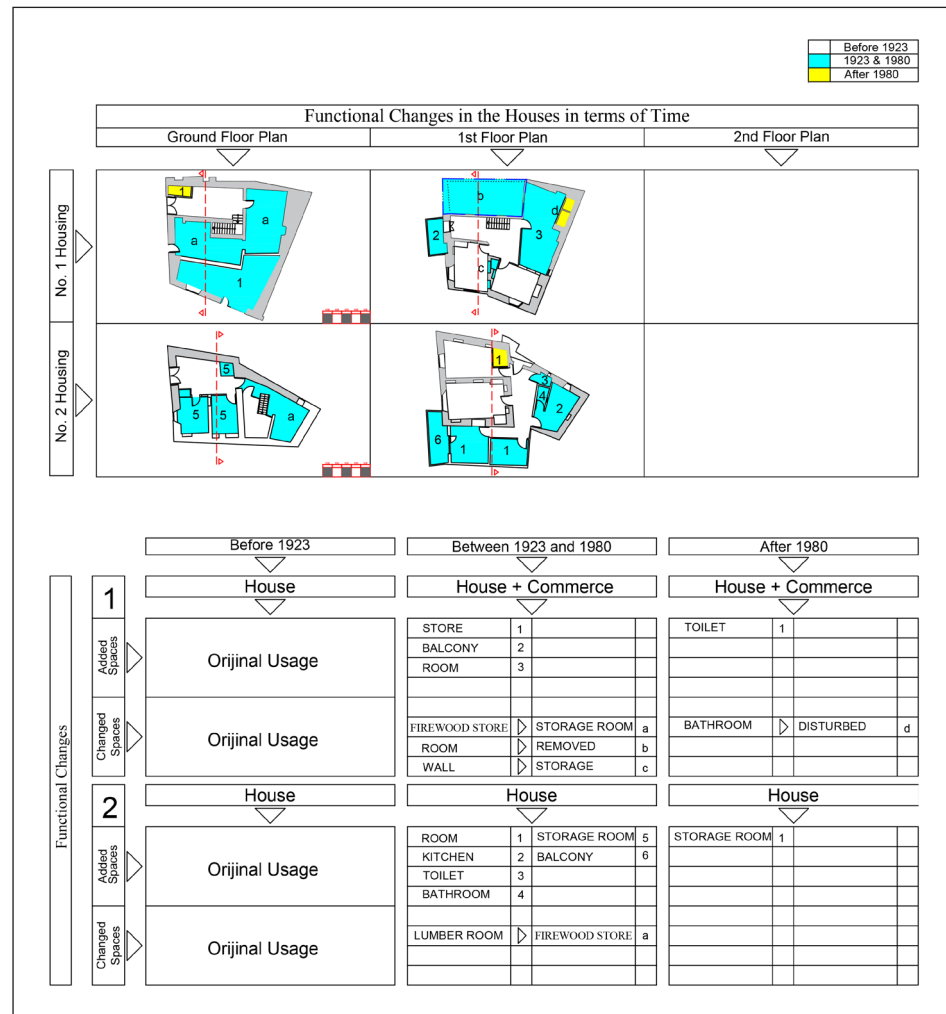
Figure 8. *1 and 2 housing.*

ed spaces and the spaces which were changed. The spaces added in the first group were determined, but in the second group, the spaces changed because of removal or degradation was examined. In order to ease the comprehensibleness of the changes in tables, the spaces added through the plan section were shown with numbers and changing spaces were shown with letters.

The changes in the functioning of the houses have been examined as a result of their intervention. Some insights have been made under the heading of added, corrupted, and removed functions. Depending on these determinations, the adding, removals/degradations, and renewed parts were revealed by examining the survey reports of massive changes occurred in three periods and through physical site visits.

According to this;

In the house number 1; the planning scheme changed by the additions, removals made on the ground floor and first floor and deteriorations occurred in time. This caused the change in the form of structure. In the house number 2; The room which was added to the building as a result of the interaction with the next house and its form are some of the biggest changes occurred between the years of 1923-1980 that affected the building. The additions made caused changes on the planning scheme of building (Building Survey Report, 2011)(Figure 8).

In the house number 3; the planning scheme changed by the additions made in interior place. This caused the change in the form of structure. In the house number 4; the planning scheme changed with the adding made in the interior space. However, this did not cause any change in the form of the building (Figure 9).

In the house number 5; the area
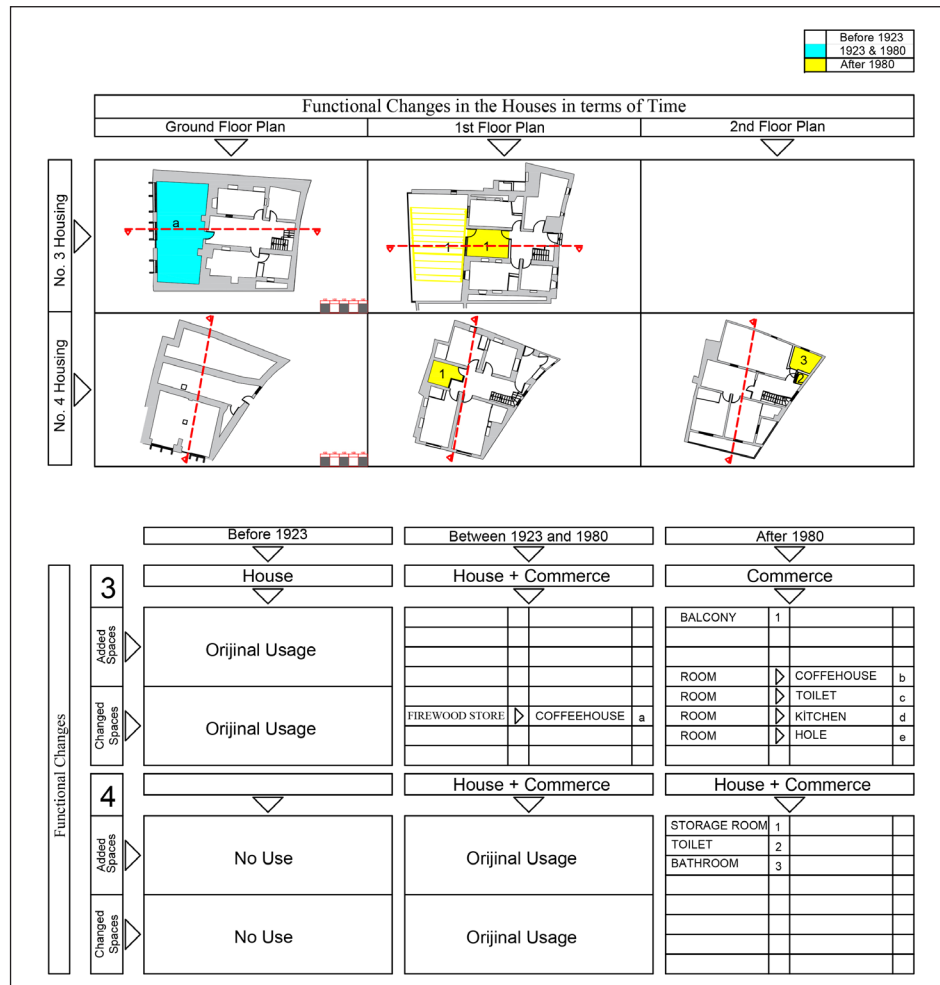
Figure 9. 3 and 4 housing.

which had the function of Blind Street before 1923 was added to the building by closing the top of it at the later period. The planning scheme of the building was changed by making an addition. Also, in the period after 1980, there is not seen any physical change. In the house number 6; the change was observed which was done by making two additions to the building between the years of 1923-1980 and after 1980. The planning scheme changed by the additions made in interior place (Building Survey Report, 2011) (Figure 10).

In the house number 7; there was observed that the place which had the overhanging part at the south side was removed by narrowing it and the balcony came forward accordingly. The planning scheme changed with the additions done in interior place. In the house number 8; the deteriorations occurred on the upper floor caused the changes in the form of structure. There was observed that the place which was next to the building was removed. The planning scheme changed with the additions inside the interior place (Building Survey Report, 2011) (Figure 11).

In the house number 9; the backside built after 1980 was destroyed and it was used as the garden. This situation changed the rear frontage by changing the rear structure form. In the house number 10; there was seen a change in the form of the building as a result of removing overhanging part between the years of 1923-1980. After 1980, balconies were removed and added to the room. Thus, the planning scheme changed as a result of adding made in interior space. This situation also affected the form of structure and changed the frontage accordingly (Building Survey Report, 2011) (Figure 12).

As a result of functional changes, The graph of time-dependent functional changes in 10 houses on the following schematic is tabulated together in plan and section plan (Figure 13).
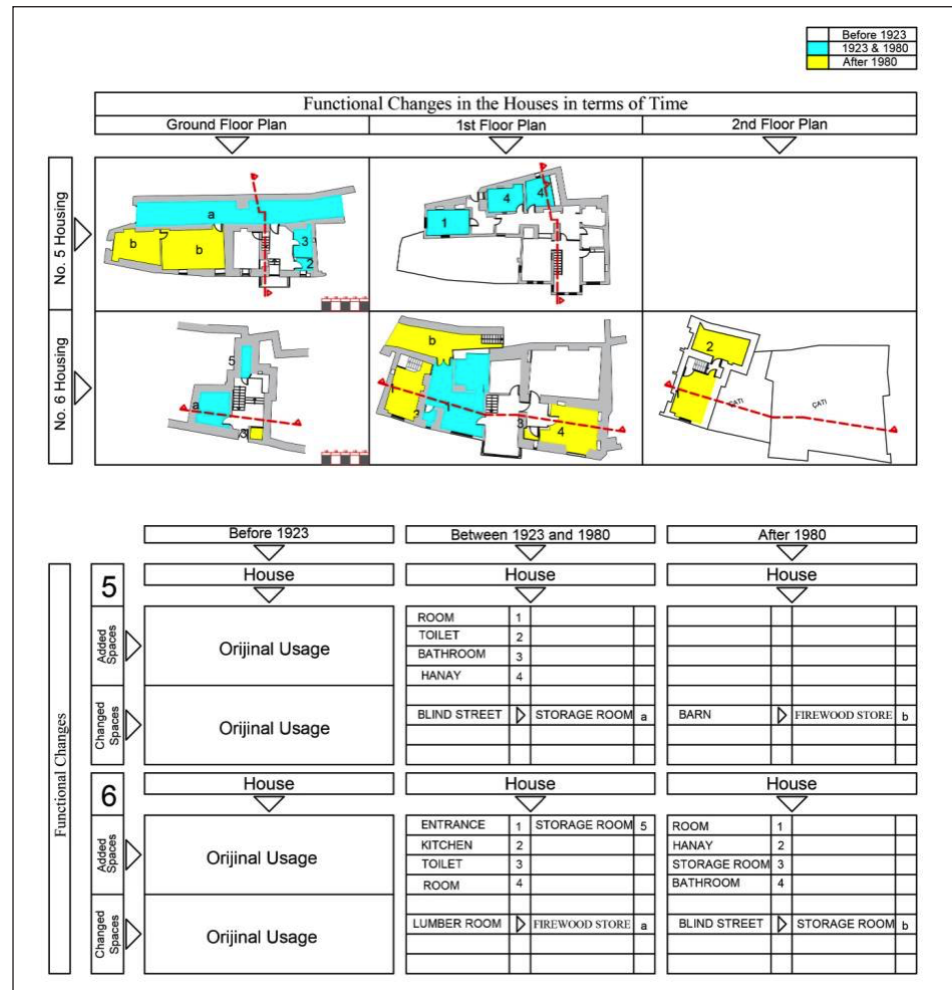
Figure 10. *5 and 6 housing.*

6. Results and discussion

While analyzing the tables, spatial change processes have been discussed in terms of the time concept expressing the periods of before 1923, between the years of 1923-1980 and after 1980 which are revealing the change. In order to see all changes occurred, physical and functional alteration analyses over today's use were carried out through specified periods and they were generally examined over the frontages which were renewed upon the massive changes because of decomposition or removal or adding the structural elements and street rehabilitation projects. According to this, there have been various changes in all of these 10 houses, but the massive changes, in other words, functional changes that change the frontage character were identified.

General view of Hacı Ali Aga Street in terms of South and West frontages and the facades of northward buildings (Figure 14).

The houses numbered 1, 2, 3, 7, 8, 9, 10 were changed again during street rehabilitation and the project was not applied on houses numbered 4, 5, 6. The old elements were removed depending on the changes until 2015 on windows, doors that are at frontages and the renewal was carried out. In some part of them, the changes were done in interior space and on the character of frontages by making the adding. Inside the period from pre-1923 period until the period after 1980; red color meant adding, the blue color meant removals and yellow color meant the renewals according to rehabilitation projects and the changes on frontages are illustrated below (Figures 15, 16).

There have been a lot of changes because of adding and deterioration or removal of construction elements in nine houses as a result of the functional changes within the process. The functional changes affected the structure form and also affected the physical
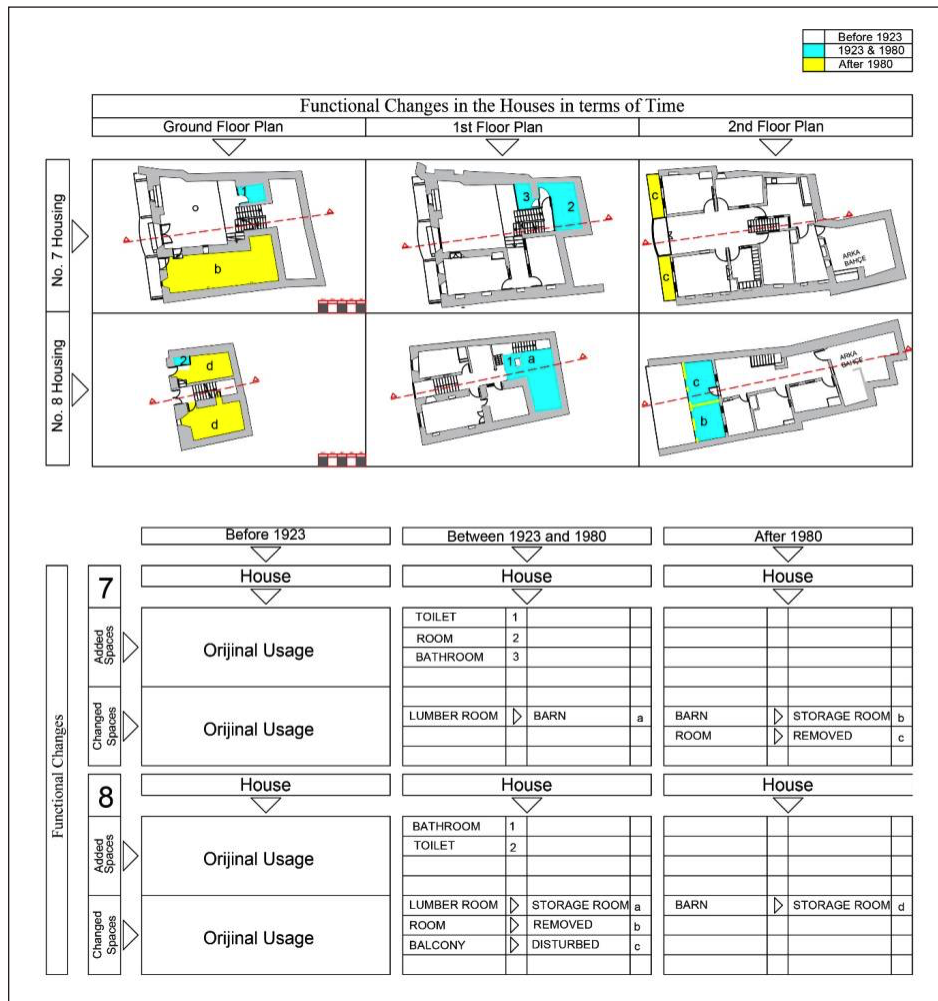
Figure 11. *7 and 8 housing.*

character accordingly. Excluding these facts, as a result of street rehabilitation carried out in 2015, the renewals were done for the form of structure and frontages (Table 1).

The change on the structure form for revealing the physical changes in the structure was evaluated with below the physical change table depending on the plan and frontage construct. The structural elements added to the table were shown with red color and the structural elements removed from the table were shown with blue color (Figure 17).

The changes occurred on frontage construct of ten houses determined according to this situation can be summarized as follows.

• In the house number 1; there was made some changes on the form of building with the removals on the thick wall at the first floor between the years of 1923-1980. As a result of deteriorations of some walls and upholstery lo-

cated on the upper floor, the additions of walls, doors and windows were added to plan scheme. The frontage was changed as a result of removing the walls, upholstery, ceilings, roofs and doors because of the interaction with the next building and adding the balcony in the later period while there was not any balcony in genuine usage.

• In the house number 2; As a result of adding the new mass to the building after the Muslim people settled the house, the additions of walls, upholstery, ceilings, roofs, windows and doors were added to the building. At the same time, the planning scheme changed by adding wall, door, window and balcony in interior places over the time and this situation reflected the frontage accordingly.

• In the house number 3; the additions of wall and door were made for the building. Due to the building built next to the house, the windows at the east frontage were closed and turned
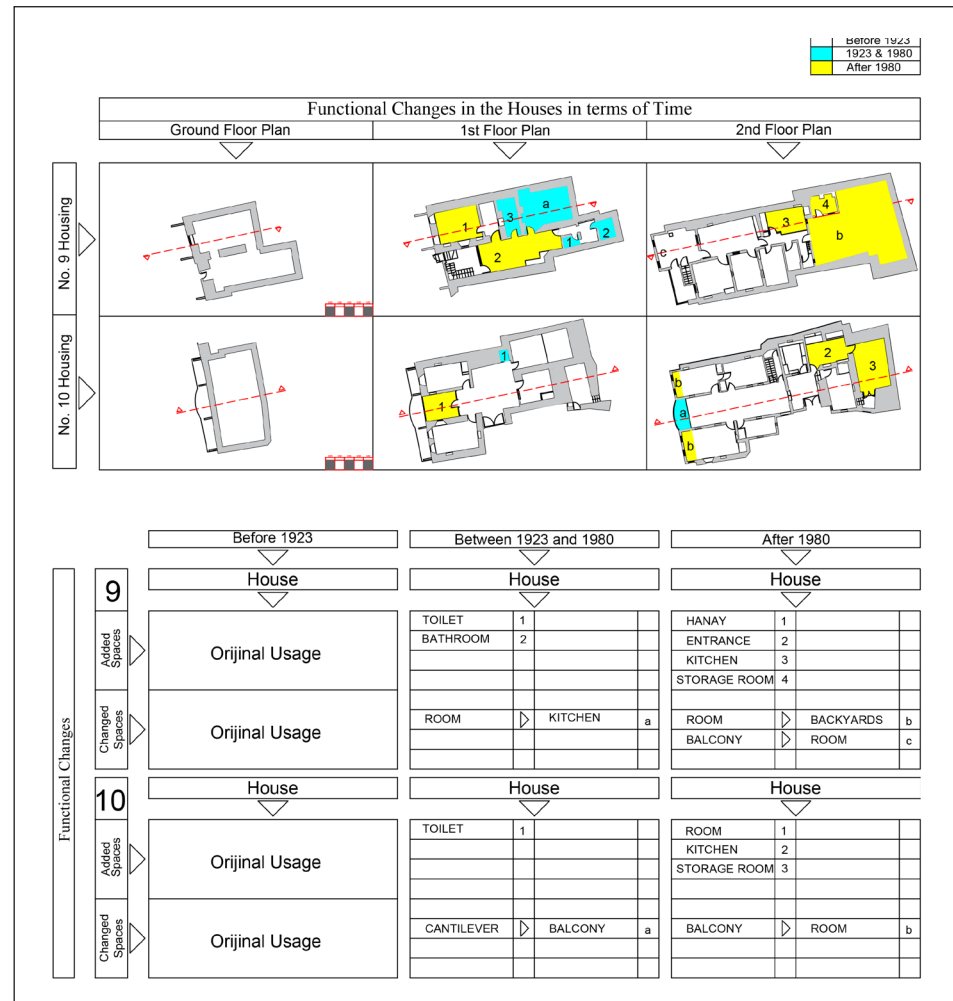
Figure 12. 9 and 10 housing.

into the cabinet. Also, the balcony of the building was closed. However, the form of building did not change. Due to the change of function in the building after 1980, there was a change on the frontage by the addition of roof on balcony.

• In the house number 4; the additions of wall, door, and window were made to the building only in interior places. There was not made any change on frontage. The form of building also did not change.

• In the house number 5; the additional structure built on the blind alley attached to the building between the years of 1923-1980 was formed by the addition of wall, upholstery, ceiling, roof, door and windows. The frontage layout of additional structure built and building changed exactly.

• In the house number 6; there seem new building masses added in time and the additions of wall, upholstery, ceiling, roof, window, door and stairs.

The additional structures changed the frontage characteristic of the building.

• In the house number 7; there seems, the walls, ceiling and roof at the frontage were removed after 1980 and the new wall was added downward. Between the years of 1923-1980, the additions of the door, window and wall were done for interior places and plan scheme was changed accordingly. The frontage layout was changed by the removals and balcony addition in building.

• In the house number 8; there seems the exterior wall on the upper floor at the balcony side was removed as a result of deterioration and there was built a new wall downward. As a result of this, the ceiling and roof were removed. The flight of stairs was begun to be used as a place by adding wall and door for it. These changes showed themselves on the second floor at frontage.

• In the house number 9; there have been changes in the planning scheme

Figure 13. *The graph of time-dependent functional changes in houses.*

Figure 14. *Hacı Ali Aga Street, the frontage locations of genuine ten (10) houses.*
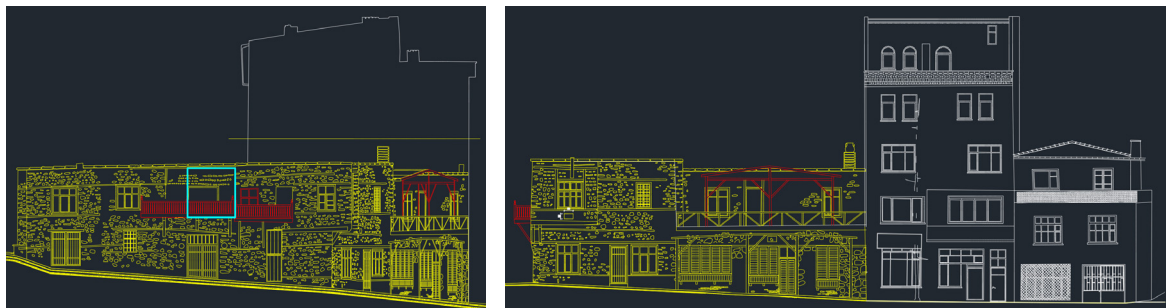
Figure 15. *The south frontage.*

Figure 16. *The northward frontage and west frontage.*

Table 1. *The general evaluation of frontage changes.*

Houses	Additions	Removals	Deteriorations	Renewal
1	X	X		X
2	X			X
3	X			X
4				
5	X			
6	X			
7		X		X
8		X	X	X
9		X		X
10	X	X		X

with added wall, door, and window. Also, the balcony item was added to the room. This also caused the change on frontage layout

• In the house number 10, the balcony was added after the removal of the wall in overhanging part on the upper floor and the front was changed by adding the balcony elements to the room. The planning scheme was changed by adding the Wall and door in interior space.

7. Conclusions

The cultural changes taking place depending on the time bring the spatial change processes together. These also front us as functional changes. The indoor construct changes through additions, removals, and deteriorations in places. Sometimes, this is also not understood in the form of structure and also sometimes, it causes the change. This change in the form of the structure causes the change in the character of frontage and it changes the tissue of street and even the characteristics of settlement area.

The frontages of the building are very important in terms of reflecting the history and culture of settlement. Thus, the change in cultural continuity is inevitable; however, the tissue and environment of the building should be taken into consideration in places as Sille that have historical values.

Sille that is an important center in history where different cultures lived together was chosen as working area and 10 tiered houses that are in Hacı Ali Aga Street that is one of the important arteries where Muslims and
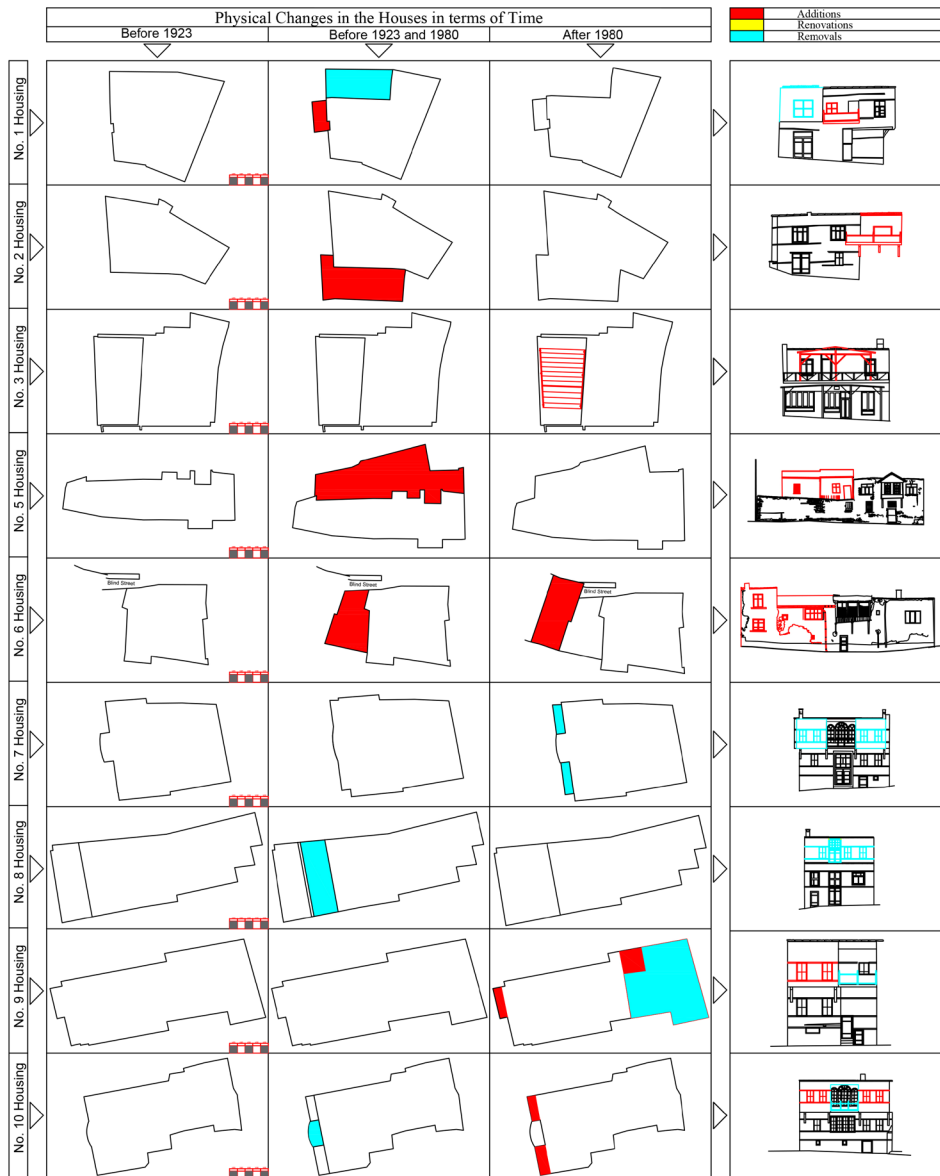
Figure 17. *The graph of physical changes in houses.*

non-Muslims lived together was discussed.

In the scope of the study, the functional changes on houses created as a result of cultural change occurred in different periods were revealed. It was determined that these changes caused important changes in structure form. All these changes changed also the frontage character and made an impact on the general tissue of Street accordingly.

Below general results could be revealed in terms of chosen houses.

• While the genuine plan schemes of the subjects examined and today's place setup are compared, it was determined that there were additions, removals, and deteriorations on places

and construction elements.

• There was made a function addition for trading on the houses overlooking the main street in time.

• The social changes occurred in time inside the process as cultural change, change on family structure; increase on the number of family members in time affected also the residential use situation of the chosen houses. Both the physical and functional changes affected also the structure form and there were seen additions and removals for the building. Some samples could be given for this situation as; adding the blind street to the building, adding the hanay rooms to the building for the married people.

• It is possible to say that, generally, walls, additions for the doors, plan

schemes were changed for all subjects in time and the houses were made suitable for the using conditions of today.

• Bath, toilet, room and depot were mostly added to the houses. It could be thought that changing life conditions and increasing the numbers of family members caused these additions.

• There are some places in the buildings which reflect the characteristics of Muslim and non-Muslim people. These places changed as long as the people became different. The intended use of some places changed as a result of the leaving of non-Muslim people from Sille. For example, the coffer house which was used by the non-Muslim people for making wine was removed. There was determined that these places were transformed into the rooms where the syrup is made, barns for the animals or the rooms used for storage.

The following suggestions could be made as a result of this study.

• The changes made within indoors should be formed by considering its effects on the frontages that are the external skin of the building.

• The spatial continuity could be provided with the changes on the buildings that are made at the end of the adaptation process as a result of cultural change.

• The changes made in order to provide the genuine appearance of buildings could be done by using genuine materials.

• The precautions could be taken by the authorities in order to prevent the changes in terms of interior places and frontages of the buildings which have the character of a historical museum with the traces of different cultures inside without considering cultural values of them.

• Determining the effect of cultural change over architectural design could be useful for providing the cultural continuity of the region.

• The changes occurred on the frontages of the buildings should be determined because of the fact that they change the view of street and tissue of city accordingly.

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